

# Exhibit 87

Deposition of Hal J. Singer, Ph.D. (September 27, 2017) (excerpted)

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF NEVADA

- - -

IN RE: : Civil Action  
: DOCKET NO.  
CUNG LE, NATHAN QUARRY, : 2:15-cv-01045-RFB-  
JON FITCH, BRANDON VERA, : (PAL)  
LUIS JAVIER VAZQUEZ and :  
KYLE KINGSBURG, on behalf : CLASS ACTION  
of themselves and all :  
others similarly :  
situated, :  
:   
Plaintiffs, :  
:   
v. :  
:   
ZUFFA, LLC, d/b/a :  
ULTIMATE FIGHTING :  
CHAMPIONSHIP and UFC, :  
:   
Defendants. :

- - -

Wednesday, September 27, 2017

- - -

Videotaped deposition of  
HAL J. SINGER, Ph.D., taken pursuant to  
notice, was held at the law offices of  
Berger & Montague, P.C., 1622 Locust  
Street, Philadelphia, Pennsylvania 19103,  
beginning at 9:24 AM, on the above date,  
before Constance S. Kent, a Certified  
Court Reporter, Registered Professional  
Reporter, Certified LiveNote Reporter, and  
Notary Public in and for the Commonwealth  
of Pennsylvania.

\* \* \*

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1 opposed to as a percentage of revenue?

2 MR. CRAMER: Objection to  
3 form, to generally. For what  
4 purpose?

5 THE WITNESS: A firm could,  
6 if a firm bills -- if a law firm  
7 bills an associate out at \$400 an  
8 hour, it could express what the --  
9 what the young lawyer's salary on  
10 an hourly basis is as a -- under  
11 an assumed utilization rate as a  
12 percentage of that young lawyer's  
13 bill rate.

14 BY MR. ISAACSON:

15 Q. And are you aware of any  
16 studies which express the marginal  
17 revenue product of labor in terms of the  
18 percentage of revenue of the firm?

19 A. I'm not aware, but as you've  
20 expressed it, that's not quite what I'm  
21 doing either.

22 Q. Now, in terms of -- did you  
23 make any effort to measure the marginal  
24 revenue product of labor of UFC fighters?

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1 A. Yes.

2 Q. Okay. And what would you  
3 point to me for that?

4 A. What I did, which is I -- I  
5 calculated the average revenue per event,  
6 per fighter, and I'm using that as a  
7 proxy for the marginal revenue product.

8 Q. All right. If the  
9 average -- when you look at the average  
10 revenue per event, per fighter, how do  
11 you determine what part of that revenue  
12 is the contribution of the fighter as  
13 opposed to, for example, marketing,  
14 promotions, production or the work of the  
15 overall firm?

16 A. So for my purposes, I don't  
17 need to figure out that -- that  
18 decomposition. I will note, however,  
19 that I cite a study in my literature  
20 review section that suggests that the  
21 fighter is responsible for, if not all,  
22 the vast majority of -- of the  
23 pay-per-view revenues that are captured  
24 and not the brand.

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1 Q. Well, I didn't ask about the  
2 brand.

3 The -- you would agree --  
4 you would agree with me that effective  
5 marketing and promotion could increase  
6 the average revenue per event, correct?

7 A. Yes.

8 Q. And you would agree with me  
9 that super- -- improving television  
10 production can increase the average  
11 revenue per event?

12 MR. CRAMER: All things  
13 equal?

14 MR. ISAACSON: Yes.

15 THE WITNESS: I'm not sure  
16 what -- what you mean by improving  
17 television production.

18 BY MR. ISAACSON:

19 Q. A better production that  
20 people enjoy more.

21 MR. CRAMER: Objection to  
22 form.

23 THE WITNESS: And you're  
24 asking me if I can conceive of

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1 this as a matter of theory?

2 BY MR. ISAACSON:

3 Q. Yes.

4 A. As opposed to whether it  
5 actually happened?

6 Q. Yes.

7 A. I think I'm -- I'm going to  
8 grant you that as a matter of theory one  
9 could -- one could add value by  
10 increasing the quality of the production.

11 Q. Okay. Now, in this case,  
12 you did not do an actual study yourself  
13 of the contribution of the UFC fighters  
14 to the average revenue per event; is that  
15 right?

16 MR. CRAMER: Asked and  
17 answered.

18 THE WITNESS: I think that's  
19 correct. As I noted a few moments  
20 ago, that was not necessary for my  
21 purposes.

22 BY MR. ISAACSON:

23 Q. By using the average revenue  
24 per event, per fighter as a proxy, were

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1 you using that as a proxy for the  
2 marginal revenue product of that labor?

3 A. Yes.

4 Q. Okay. And you were assuming  
5 that all of that average revenue per  
6 event, per fighter was the product of  
7 that labor as opposed to some other  
8 source?

9 MR. CRAMER: Form.

10 THE WITNESS: No, I don't  
11 think I'm assuming that.

12 BY MR. ISAACSON:

13 Q. When -- when you look at  
14 average revenue -- I'm sorry. When you  
15 ordinarily look at the marginal revenue  
16 product of labor, do you talk about  
17 everybody who works in the firm including  
18 management?

19 MR. CRAMER: Objection to  
20 form.

21 THE WITNESS: If -- if this  
22 were some other case and you were  
23 interested in computing the  
24 marginal revenue product of

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1 management, you might -- you might  
2 be interested in that. But that  
3 wasn't what I was trying to do  
4 here.

5 BY MR. ISAACSON:

6 Q. All right. Here, have you  
7 attempted to actually estimate the  
8 marginal revenue product of the fighter  
9 portion of the labor force of the UFC?

10 MR. CRAMER: Objection to  
11 form.

12 THE WITNESS: I think you're  
13 getting at the same question now,  
14 just asked in a different way  
15 which is have I done a  
16 decomposition of the marginal  
17 revenue product between the  
18 fighters and -- and Zuffa, and the  
19 answer is no, I have not done that  
20 decomposition.

21 BY MR. ISAACSON:

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4 Q. You, yourself, have not  
5 looked at the levels of pay over time  
6 paid to Zuffa's fighters other than  
7 looking at this study?

8 MR. CRAMER: Objection to  
9 form.

10 THE WITNESS: So I wouldn't  
11 put it that way.

12 BY MR. ISAACSON:

13 Q. How would you put it?

14 A. I am absolutely looking at  
15 their pay over time in the sense that I'm  
16 recording their pay as the numerator of  
17 my dependent variable. So to suggest  
18 that I'm not looking at their -- their  
19 pay is erroneous.

20 Q. All right. The -- was there  
21 a period where the average revenue per  
22 event in UFC had -- have you looked at  
23 any periods where there were abrupt jumps  
24 in that?

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1 Class where I demonstrate what I consider  
2 to be a rigid pricing structure when it  
3 comes to identity payments.

4 Q. Okay. And did you do any  
5 separate economic modeling such as you  
6 did for the bout class?

7 A. No, I did not.

8 Q. The -- and you have two  
9 methods of estimating damages for the  
10 identity class as I understand it. One  
11 is that you take the percentage increase  
12 in revenue that would be paid as the  
13 fighter share, the increased percentage.  
14 So for example, if the fighter share went  
15 from 50 to 75 percent, that would be a 25  
16 increase in fighter share, and then you  
17 apply that percentage increase to the  
18 identity payments actually made to  
19 fighters?

20 A. Close. As stated in  
21 percentage terms, and I give the -- I  
22 give the sample in paragraph 253 where I  
23 put the but-for share --

24 Q. Yes.

Page 219

1 A. Over the -- right, over the  
2 actual share, and then I multiply that by  
3 the payments that were made, correct. I  
4 mean, so long as that's what you're  
5 saying, we're on the same page.

6 Q. I think we're saying the  
7 same thing.

8 A. Okay.

9 Q. But you're applying the  
10 percentage increase in the fighter share  
11 to the absolute payments for the identity  
12 payments?

13 A. Yes.

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13 MR. ISAACSON: Okay. All  
14 right. Why don't we take a break?

15 THE VIDEOGRAPHER: The time  
16 is 2:10 PM. This is the end of  
17 Disk 2. We are off the record.

18 (Recess.)

19 THE VIDEOGRAPHER: The time  
20 is 4:26 PM (sic). This is the  
21 start of Disk No. 3 and we are now  
22 on the record.

23 BY MR. ISAACSON:

24 Q. You can look at --

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1 MR. CRAMER: The time is  
2 what?

3 THE VIDEOGRAPHER: 2:26 PM.  
4 I'm sorry.

5 MR. CRAMER: Okay.

6 BY MR. ISAACSON:

7 Q. If you could look at page  
8 154 of your report, Table 7, which  
9 displays the results of your first  
10 analysis of common -- econometric  
11 analysis of common impact. We've looked  
12 at this before.

13 A. Yes.

14 Q. And it says bout class  
15 compensation structure. And in paragraph  
16 228 when you're discussing this, in the  
17 first sentence -- I've actually said this  
18 sentence several times, I think:

19 "I performed regressions to  
20 determine whether gains or losses in  
21 compensation are broadly shared across  
22 the bout class."

23 A. Yes.

24 Q. Was -- did you use for the

Page 222

1 regressions in Table 7 the Zuffa bout  
2 class data? And by that I mean, that's  
3 defined at page 203 of your report,  
4 Appendix 2, the first dataset.

5 MR. CRAMER: Take your time  
6 to look at the appendix he's  
7 talking about.

8 THE WITNESS: Do you want to  
9 take me to the appendix?

10 BY MR. ISAACSON:

11 Q. Sure. On page 203. The  
12 first dataset, Zuffa's bout compensation  
13 data.

14 A. I believe that that dataset  
15 would be sufficient to use to generate  
16 the analysis and the results in Table 7.

17 Q. Does that mean that's what  
18 you did use?

19 A. I'm pretty sure that's what  
20 I did do.

21 Q. Okay. And then looking at  
22 Table 8 where you report the results of  
23 your other impact, the econometric  
24 analysis, and there are different numbers

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1 reported in the errata that are slightly  
2 higher?

3 A. Right.

4 Q. The -- I guess we can look  
5 at those. That would be Exhibit 3, which  
6 reports ranging from 99.1 percent to  
7 96.3 percent, depending on which part of  
8 the table you're looking at.

9 Now, as I understand the way  
10 you did this is that you took the -- the  
11 increased fighter share of revenue, you  
12 translated that into a percentage  
13 increase in -- a predicted percentage  
14 increase in pay, and then you applied  
15 that to individual events?

16 A. Not quite.

17 Q. Close?

18 A. I can say it better.

19 Q. Yeah. Go ahead.

20 A. Okay. So you have for each  
21 fighter/event pair the actual share of  
22 the event revenue that went to the  
23 fighter in the real world, right?

24 Q. Okay.

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1 A. And now what you're going to  
2 do is predict, given that fighter's  
3 attributes and everything that happened  
4 in the fight and all the other right-hand  
5 side variables, what that fighter would  
6 have received in a but-for world with  
7 either zero or 20 percent foreclosure  
8 share, right, and you're going to ask a  
9 simple question: Did the predicted  
10 share, fighter wage share for that  
11 fighter/event pair, did that exceed or  
12 was it below the actual share. That's  
13 how -- we're going to make judgments on  
14 each -- on each observation whether they  
15 were impacted that way.

16 Q. All right. So a couple  
17 pieces here just to make sure I  
18 understand the math. So when you were  
19 doing this calculation, you're increasing  
20 the total fighter's share for the  
21 fighter's at the event, but between two  
22 fighters, would their proportional share  
23 remain the same? Let me --

24 A. The premises is wrong.

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1 You're not increasing anyone's share.

2 Q. Okay.

3 A. This is just a comparison.  
4 You're comparing the actual fighter share  
5 for a given event, right?

6 Q. Right.

7 A. To his predicted share based  
8 on the regression model when you set the  
9 foreclosure share equal to zero or  
10 20 percent. It's all -- it's just a  
11 comparison. No one is getting moved up  
12 or down.

13 Q. Right. I understand it's a  
14 comparison. I'm trying to get comparison  
15 right, so be patient with me.

16 A. But the premise was -- the  
17 premise was wrong in the question.

18 Q. Well, don't -- say the  
19 premise is wrong and I'll ask a new  
20 question.

21 A. Okay.

22 Q. The -- so for the predicted  
23 share, right, if you had a group of  
24 fighters at an event, their predicted



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1 shares would all rise once the total  
2 fighters' share rose; is that correct?

3 A. That's not how I'd put it.

4 Q. Okay. Well, you calculate a  
5 total -- an increase in total fighters'  
6 share, correct?

7 A. Not for this model.

8 Q. No, I know. But are you a  
9 applying --

10 A. I thought we were on Table  
11 8.

12 Q. Yes. Yes, we are.

13 A. But there's no -- there's  
14 no --

15 Q. You're not taking your  
16 predicted increase in fighter share from  
17 somewhere else and applying it in here?

18 A. No.

19 Q. Okay. Then how -- you're  
20 doing a separate but-for analysis of  
21 predicted fighters' share for each event;  
22 is that right?

23 A. I would say for each  
24 fighter/event pair. We're going to use

Page 227

1 the regression from the anticompetitive  
2 effects section and we are going to  
3 project what -- what we think that  
4 fighter would have received as a  
5 percentage of the event revenue  
6 conditional on the foreclosure share  
7 being equal to zero or 20 percent, and  
8 we're going to compare that predicted  
9 fighter share to the actual fighter  
10 share, right? And we're going to make a  
11 call for each observational database, is  
12 it predicted above or is it below.

13 Q. Right.

14 A. And then we're going to make  
15 it -- then we're going to fill in these  
16 boxes here.

17 Q. So I'm trying to understand  
18 how you get there. So you're not running  
19 an individual regression on each fight or  
20 event share?

21 A. We don't do individual  
22 regressions, no.

23 Q. The -- I'm glad you thought  
24 I got that right.

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1 The -- you run the  
2 regression, and you're not running the  
3 regression at the event level either?

4 A. Well, remember what an  
5 observation is in regression, it's a  
6 fighter/event pair, right, so a given  
7 fighter with a given event, we can  
8 calculate what he or she earned as a  
9 percentage of event revenue. That's the  
10 left-hand side variable.

11 Q. Right.

12 A. And then you have all these  
13 host of variables that could explain what  
14 that share was, the key one being the  
15 foreclosure share.

16 So we fit a model based on  
17 actual world data, and then to make a  
18 projection for each individual fighter,  
19 we use the parameters that came from that  
20 one aggression model and we're going to  
21 project what that fighter's wage share  
22 would have been had a foreclosure share  
23 been either equal to zero or 20 percent.

24 Q. So I do understand that

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1 you're doing the projection and I'm just  
2 trying to understand how you're doing the  
3 projection.

4 A. Okay.

5 Q. The -- and I appreciate you  
6 staying with me on that.

7 A. I'm okay.

8 Q. The -- so when you run the  
9 foreclosure regression, does that result  
10 in observations that create the  
11 prediction for an individual fight or  
12 event?

13 A. You can use the regression  
14 to project or predict what a fighter  
15 would have received in a but-for world  
16 where the foreclosure share is zero or  
17 20 percent.

18 Q. Right. And is that -- when  
19 you do that projection, is that  
20 projection specific to that event or are  
21 you taking an average from the regression  
22 and applying it across events?

23 MR. CRAMER: Objection to  
24 form.

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1 THE WITNESS: You're using  
2 the parameters that came out of  
3 the -- the regression to then make  
4 a prediction. And so, right, you  
5 have the coefficients and you've  
6 got a given fighter's right-hand  
7 side variables, right? And now we  
8 can -- we can predict based on one  
9 slight modification to the actual  
10 world, which is that we're going  
11 to take the foreclosure share down  
12 to zero or 20 percent, and we're  
13 going to predict what that  
14 fighter's wage share would have  
15 been, and then we're going to  
16 compare it to the actual wage  
17 share for that event.

18 BY MR. ISAACSON:

19 Q. Does the prediction  
20 within -- does the prediction within a  
21 year -- I'm sorry. Does the prediction  
22 for events within a year, if it predicts  
23 a 15 percent increase in fighter's  
24 share --

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1 A. Oh, it's not -- it's not  
2 doing that. It's not -- I think this  
3 might be the disconnect. It's not  
4 predicting an increase, right? It's just  
5 predicting a wage share. And it's our  
6 job to then, as the last step, compare  
7 the prediction to the actual.

8 Q. I'm sorry. I --

9 A. In some cases it's above.

10 Q. I meant a 15 percent  
11 increase in wage share?

12 A. But it's not -- it's not  
13 uniformly predicting that everyone would  
14 get a 15 percent increase relative to  
15 what they actually got. It's literally  
16 predicting what they would have gotten  
17 conditional on all of their --

18 Q. Right.

19 A. -- explanatory --

20 Q. So for each event during the  
21 year, is it predicting the fighters would  
22 get the average increase in wage share  
23 for that year?

24 A. No.

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1 Q. Okay. Is it getting -- is  
2 it predicting for each event during the  
3 year, a specific increase in wage share?

4 A. No.

5 Q. Okay. So you have two  
6 events during the year?

7 A. You don't have two, you have  
8 a ton.

9 Q. I know but for purposes of a  
10 really simple example --

11 A. Okay.

12 Q. -- that's going to help  
13 educate me.

14 A. Okay.

15 Q. The -- during the same year,  
16 and during that year you've predicted  
17 that, through the regression, that the  
18 overall wage share or fighter share is  
19 going to increase. All right?

20 A. Yes.

21 Q. Okay. Tell me what would  
22 be -- how -- how will that play out in  
23 terms of the prediction for those two  
24 events?

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1 A. It would --

2 MR. CRAMER: Incomplete  
3 hypothetical.

4 THE WITNESS: It would tend  
5 to predict that most fighters can  
6 be shown to be worse off in the --  
7 in the actual world compared to  
8 the but-for world.

9 BY MR. ISAACSON:

10 Q. Right. But in terms of --  
11 I'm trying -- in terms of your Table 8?

12 A. Yes.

13 Q. The -- if the fighter share  
14 for that year according -- in the but-for  
15 world was going to rise by 15 percent?

16 A. Okay.

17 Q. Would you be calculating  
18 that the fighter share for the event as a  
19 whole would go up by 15 percent?

20 A. Not for the purpose of this  
21 exercise, no.

22 Q. Okay. How would you -- if  
23 the fighter's share for the year was  
24 going up by 15 percent, how would you



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1 translate that into a fighter's share for  
2 the fighters at a specific event?

3 A. It depends on what exercise  
4 you're doing. If you want to do  
5 something different from what can he did  
6 here.

7 Q. I don't want to do something  
8 different. I want to do what you did  
9 here.

10 A. Well, then, you need -- you  
11 need to get away from starting with the  
12 aggregate effects in a given year.  
13 That's not -- that's not working here.  
14 All right? What's working here is that  
15 we're going to fit a model based on these  
16 thousands of observations and we're going  
17 to go back and project for each member of  
18 the bout class for each event what his or  
19 her but-for wage share would have been if  
20 foreclosure had been zero or 20 percent.  
21 Then we are going to compare that  
22 prediction, which is different for  
23 everyone, right, because everyone has a  
24 different set of right-hand side

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1 characteristics, we're going to get a --  
2 we're going to get a different prediction  
3 for everyone and we're going to compare  
4 it to their actual.

5 And what you're saying in  
6 the tables is that most people would have  
7 been better -- most people in the class  
8 would have been better pursuant to this  
9 model. There is a very small fraction,  
10 it's under 1 percent now, who would not  
11 have been better off under this  
12 particular model.

13 Q. Is it -- the dependent  
14 variable was the -- actually, it was  
15 different.

16 The fighter share is a right  
17 hand or left hand?

18 A. It's left hand. It's the  
19 dependent variable.

20 Q. Yeah, yeah, okay. So is it  
21 that you're looking at the fighter share  
22 on the left hand, the right hand has a  
23 number of characteristics that are  
24 individual to each fighter, they're

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1 listed in your variables, did they have  
2 knockdowns and things like that, and  
3 you're seeing -- and from that you're  
4 getting your prediction?

5 A. Correct. What we're trying  
6 to do is best we can to figure out what  
7 can explain movements in a given  
8 fighter's wage share for given events,  
9 correct.

10 Q. Right. Okay. I think I'm  
11 getting closer now.

12 So you've got the left hand  
13 and the right hand, and if on the left  
14 hand, the fighter's share increases, then  
15 you have a prediction as to what will  
16 happen based on the individual  
17 characteristics of the fighter and the  
18 event and then -- and you compare that to  
19 what actually happened?

20 A. I wouldn't put it that way.

21 Q. Okay.

22 A. A model, once it's fit, can  
23 make a prediction for each fighter as to  
24 what his or her wage share would have

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1 been in this but-for world. It's that  
2 simple. And then we're going to compare  
3 the predicted wage share to the actual  
4 wage share.

5 Q. Okay. Then it's the --  
6 you're putting in the foreclosure amount  
7 along with the individual characteristics  
8 and then getting the wage share and  
9 comparing that to the actual -- what  
10 actually happened?

11 A. Yes.

12 Q. Okay. Thank you.

13 The -- and the -- when you  
14 do this analysis fighter-by-fighter or by  
15 fighter/event pairing, the foreclosure  
16 percentage that you're putting in there,  
17 is that the same for all fighters for  
18 each year?

19 A. Oh. So when we go into a  
20 but-for world --

21 Q. Yes.

22 A. -- whether it's the zero  
23 percent scenario, the 20 percent  
24 scenario, or the 30 percent, that is used

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1 studied that and I imagine for someone  
2 who lives very far from the venue where  
3 the live event is staged, they would not  
4 be considered reasonably close  
5 substitutes.

6 Q. So for your input markets,  
7 what evidence did you take into account  
8 to assess customer's likely response to  
9 price increase in the SSNIP analysis?  
10 And feel free to point me to the sections  
11 of your report that --

12 A. Did you mean to say -- I  
13 think you just conflated the input  
14 markets and customers. Maybe we should  
15 start over.

16 Q. Yes, I said price increase  
17 rather than wage decrease, but let me  
18 just put it this way: What evidence in  
19 your report did you take into account to  
20 assess the likely response to a SSNIP in  
21 the input markets?

22 A. Sure. So there it's the  
23 perspective of the fighters not the  
24 customers. So I was tripping up over

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1 your --

2 Q. Yes.

3 A. -- injecting customers when  
4 we're talking about input markets.

5 So I can take you to the  
6 relevant sections, and I will, but of  
7 course at high levels, I'm looking at  
8 record evidence of -- of what fighters  
9 and promoters thought about substitution  
10 possibilities as you -- if you were to  
11 move away from Zuffa to counteract a  
12 hypothetical wage cut.

13 Q. Okay. So the first thing  
14 you looked at was record evidence of  
15 substitution.

16 A. Or the perception of  
17 substitution from the stakeholders, the  
18 fighters, the promoters, and I'll just  
19 point you, if you --

20 Q. That's -- that's sufficient  
21 for -- for item 1.

22 MR. CRAMER: You asked him  
23 to look at his report.

24 MR. ISAACSON: I'm going

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1 to --

2 MR. CRAMER: Okay.

3 MR. ISAACSON: I'm not going  
4 to ask him to recite all the  
5 documentary evidence.

6 BY MR. ISAACSON:

7 Q. And I understand that  
8 there's documentary evidence that you're  
9 not reciting today.

10 Okay. Other than the record  
11 evidence of the -- about sub- --  
12 perceptions of substitutability from the  
13 stakeholders, what would be other parts  
14 of your SSNIP analysis for the input  
15 market?

16 A. I would direct you to  
17 Section 3A 1 for all of the evidence that  
18 I used to inform the construction of the  
19 relevant input market.

20 Q. That would be the record  
21 evidence that you were referring to?

22 A. Well, record evidence is  
23 fairly broad, right, because it  
24 encompasses almost everything. But I

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1 will point -- to me the -- what helps to  
2 guide me to the findings that I made with  
3 respect to the input market was the fact  
4 that Zuffa was able to successfully  
5 suppress fighter wages, wages either  
6 measured by -- by wage share, regression  
7 or by knowledge of the fact that wage  
8 shares were falling over time from  
9 26 percent to 18 percent, yet Zuffa did  
10 not suffer sufficient defection so as to  
11 render that wage decrease unprofitable.

12 Now, that -- that tells you,  
13 as a matter of economics, that a -- that  
14 a reasonable starting place for defining  
15 the contours of the relevant input market  
16 is just the fighters under Zuffa's  
17 control. That was the -- the first thing  
18 that occurred to me.

19 And once you -- once you  
20 start there, you can start looking at  
21 record evidence to determine whether  
22 additional fighters from -- from rival  
23 promotions ought to be included so that  
24 you eventually get to the smallest set of

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1 fighters such that a hypothetical  
2 monopsonist could profitably exercise  
3 monopsony power.

4 Q. All right. And you said  
5 that Zuffa was able to successfully  
6 suppress fighter wages -- wage share.  
7 You were talking only about the share of  
8 revenues there, correct?

9 A. Correct.

[REDACTED]

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5 BY MR. ISAACSON:

6 Q. All right. But in your --  
7 in your hypothetical there you held  
8 revenues constant. Did you look at, as  
9 part of your analysis of the input market  
10 and defining that market, as to whether  
11 Zuffa actually suppressed actual wages?

12 MR. CRAMER: Objection to  
13 form.

14 BY MR. ISAACSON:

15 Q. As opposed to wage share?

16 MR. CRAMER: Same objection.

17 THE WITNESS: I'm focused on  
18 wage share, of course, because  
19 it's the right thing to look at  
20 from an economic perspective.  
21 We're trying to measure  
22 exploitation, and the textbooks  
23 tell you to do it as a share of  
24 marginal revenue product.

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1 BY MR. ISAACSON:

2 Q. So my actual question was --  
3 I understand you're focused on that, but  
4 my question is, did you look at whether  
5 Zuffa actually suppressed actual wages?

6 A. Without controlling for  
7 revenues, no. Because it's incorrect to  
8 do so.

9 Q. So in performing your SSNIP  
10 analysis for the input markets, is it  
11 fair to say that you relied on the record  
12 evidence about the issue of perceived  
13 substitution from the stakeholders along  
14 with your observations that when Zuffa  
15 suppressed fighter wage shares, there  
16 weren't significant defections?

17 A. I think -- I think that  
18 encompasses a lot. I also think that  
19 Zuffa in its ordinary course of business  
20 made use of a FightMetrics (sic)  
21 database. I had -- the very first thing  
22 I did when I -- when I got this case was  
23 I started reading the economic literature  
24 on the MMA industry, and almost every

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1 article I read, the FightMetrics (sic)  
2 database formed the foundation of their  
3 empirical analysis.

4 So I thought that that was a  
5 reasonable place to begin to posit what  
6 the smallest set of fighters that could  
7 be under the control of a hypothetical  
8 monopsony would be in order for it to  
9 exercise market power.

10 Q. All right. Why did you use  
11 the smallest set of fighters not the  
12 smallest amount of promoters?

13 A. Well, because we're looking  
14 at the input market. The fighters form  
15 the elements of the input market. They  
16 happen to belong to promoters, but  
17 fighters are the elements or the  
18 ingredients.

19 But I'm -- if I'm a  
20 fighter -- just to make it clear, if I'm  
21 a fighter and I'm thinking about  
22 substituting, defecting from UFC and  
23 going to a rival promotion, I don't care  
24 what the name of the promotion is or

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1 who's running it or who the chief  
2 matchmaker is, I want to make sure that  
3 I'm going to be put inside of a pool  
4 of -- of fighters such that I have a  
5 prospect of elevating through the ranks.  
6 It's the fighters that determine what a  
7 reasonable substitute is when fighters  
8 are considering defecting.

9 Q. Now, you're not suggesting  
10 that Zuffa used the Fight Matrix data to  
11 define a market, are you?

12 A. Well, you just toggled from  
13 FightMetrics (sic) to Fight Matrix.

14 Q. I'm sorry, FightMetrics  
15 (sic). Sorry. I was bound to do that  
16 today.

17 But you're not suggesting  
18 that Zuffa used FightMetrics (sic) data  
19 to define a market?

20 A. I'm suggesting that firms  
21 are not -- are not employed -- firms are  
22 not in the businesses of defining  
23 relevant product markets as the normal  
24 course of business, right? They're doing

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1 something else. Defining markets is the  
2 task of an antitrust economist.

3 Q. All right.

4 A. But I do think it's  
5 important that Zuffa uses and relies on  
6 the FightMetrics (sic) database in its  
7 ordinary course of business.

8 Q. All right. And is that part  
9 of -- do you consider that -- that  
10 observation that Zuffa relies on the  
11 FightMetrics (sic) database to be part of  
12 your SSNIP analysis?

13 A. I think it undergirds the  
14 conclusion that -- that this is the  
15 relevant set of fighters that would need  
16 to be under the control of a hypothetical  
17 monopsonist so that the wage decrease  
18 below competitive levels would not be  
19 rendered unprofitable.

20 Q. Right. So does your SSNIP  
21 analysis for the input markets consist of  
22 anything other than the things that  
23 you've listed so far: The record  
24 evidence of substitution -- of

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1 perceptions of substitutability from  
2 stakeholders, your observations about how  
3 Zuffa suppressed fighter wage shares  
4 without defections or significant  
5 defections, and Zuffa's reliance on the  
6 FightMetrics (sic) database?

7 MR. CRAMER: Would you like  
8 him to look at his report, is that  
9 what you're asking?

10 MR. ISAACSON: He can look  
11 at his report in answering the  
12 questions. I've allowed him to do  
13 that for every question.

14 MR. CRAMER: Okay, good.

15 THE WITNESS: By looking at  
16 it, it refreshes my memory that in  
17 paragraph 101, for example, I'm  
18 looking at evidence, again from  
19 the perspective of what I call  
20 stakeholders, or mostly fighters,  
21 as to whether or not some -- some  
22 sport outside of MMA would  
23 constitute a reasonable substitute  
24 to defect to in response to a wage

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1 decrease.

2 And we can go through  
3 paragraph-by-paragraph. I don't  
4 know if that's how you want me to  
5 use the time --

6 BY MR. ISAACSON:

7 Q. I thought -- I thought that  
8 as encompassed within the record evidence  
9 of perceptions of substitute billing.

10 A. Right. But why -- I mean, I  
11 wouldn't say why we go by my memory of  
12 what I used, we have the report and we  
13 can go paragraph-by-paragraph and I  
14 can --

15 Q. Your report is long, I'm  
16 trying to see if I can get a summary of  
17 your conclusions with you having access  
18 to your report.

19 MR. CRAMER: So he wants you  
20 to take your time and make sure  
21 that you've adequately summarized  
22 your conclusions and the evidence  
23 upon which they're based.

24 THE WITNESS: Okay.